Amendments to the Specification:

Please amend paragraph 1 at page 1 of the present specification as follows:

This application ~~claims the benefit~~ is a Continuation of U.S. Patent Application Serial No. 09/669,060, filed September 22, 2000~~, and~~. This application claims priority to U.S. Application Serial No. 09/669,060 to the extent appropriate under the law. U.S. Patent Application Serial No. 09/669,060 claims priority to U.S. Provisional Application No. 60/155,611 filed on September 23, 1999, to the extent appropriate under the law. The ~~the~~ complete disclosures of U.S. Patent Application Serial No. 09/669,060 and U.S. Provisional Application No. 09/669,060 ~~which is~~ are incorporated herein by reference.

Please amend the paragraph beginning at page 4, line 27 of the present specification as follows:

Turning now to FIGS. 2, 3A, 3B, 4A and 4B, an exemplary stent delivery system 15 according to the present invention will be described. Stent 10 is shown in a non-expanded state, crimped around a balloon 20. Balloon 20 provides a mechanism for expanding stent 10 when stent 10 is placed at a desired location within a body lumen. It will be appreciated by those skilled in the art that other methods of expanding stent 10 fall within the scope of the present invention. System 15 further includes a transducer 22 to provide an imaging capability to help properly position side hole 12. Transducer 22 typically comprises piezoelectric materials for the conversion of electrical signals into mechanical energy, more specifically, sound energy. As best shown in FIG. 3A, transducer 22 is coupled to a housing 24. In one embodiment, housing 24 is disposed within balloon 20, as shown in FIG. 3A. Transducer housing 24 is positioned so that ultrasound signals transmitted from transducer 22 pass through side hole 12 into the surrounding fluid or tissue. In this manner, and as further described below, transducer 22 may be used to indicate when side hole 12 is properly aligned with a branch vessel 16 as opposed to facing a wall of main vessel 14. In an alternative embodiment (not shown), transducer 22 is mounted on an outer surface of balloon ~~25~~ 20 or positioned between balloon ~~25~~ 20 and stent 10. For example, transducer 22 may be mounted on balloon ~~25~~ 20 within sidehole 12. In one

embodiment, a guidewire 18 is disposed through balloon 20, and is used to help guide the stent delivery system to a desired region within a body lumen.

Please amend the paragraph beginning at page 6, line 1 of the present specification as follows:

FIGS. 4A and 4B depict additional details of transducer 22 and housing 24. In one embodiment, a drive cable 44 is coupled to a proximal end of housing 24. FIG. 4A further depicts passageway 40, which extends through housing 24. In one embodiment, drive cable 44 comprises two counterwound cables made of stainless steel, nitinol or the like. Such a drive cable facilitates its introduction into tortuous vasculatures. Drive cable 44 further permits rotation of housing 24, and hence the rotation of transducer 22. Preferably, such rotation is made relative to longitudinal axis ~~18~~ 200.

Please amend the paragraph beginning at page 6, line 20 of the present specification as follows:

FIGS. 5A and 5B depict a simplified view of the imaging of a body lumen with transducer 22. Similarly, FIGS. 5C and 5D depict the intensity of transmitted and reflected signals when transducer 22 is activated at the positions shown in FIGS. 5A and 5B, respectively. For example, in FIG. 5A, a voltage is applied across transducer 22 to generate ultrasound signals ~~16~~ 42 which are transmitted from transducer 22 to surrounding fluids and tissue. When signals ~~16~~ 42 encounter a change in medium, and more specifically a change in the density of the material through which the signals are passing, at least a portion of signals ~~16~~ 42 is reflected back toward transducer 22. Transducer 22 receives the reflected signal and transmits a corresponding voltage through wires 36 to a controller (not shown) for processing. When transducer 22 is positioned as shown in FIG. 5A, signals ~~16~~ 42 travel down a portion of the branch vessels 16 before being reflected by a vessel wall, occlusion, or the like. Hence, as can be seen in FIG. 5C, the reflected signal is received after some time delay relative to the initial signal pulse. Additionally, the travel time for the reflected signal results in much of the sound

energy being lost in blood or other fluid. Hence a comparatively weak signal is returned to transducer 22. Correspondingly, if transducer 22 is disposed adjacent a wall 80, such as shown in FIG. 5B, the reflected signal is received much sooner and occurs at a greater intensity than the alignment shown in FIG. 5A. The stronger echo or return signal is depicted in FIG. 5D. In this manner, ultrasound imaging, including the calculated time delay between the original pulse and the reflected signal, can be used to determine whether transducer 22 is in alignment with branch vessel 16.

Please amend the paragraph beginning at page 9, line 12 of the present specification as follows:

FIG. 10 depicts a simplified schematic of one embodiment of control circuitry 300 for use with the present invention. A high voltage source 310 is coupled to an RF pulse generator 320 which generates an electrical pulse for transmission to transducer 330 by way of a transmit/receive switch 340. Transducer 330 receives the electrical signal as voltage applied across opposing surfaces of transducer 330. The transducer material, preferably piezoelectric material, generates a soundwave, which propagates from the surface of transducer 330. As previously noted, the soundwaves reflect off changes in medium density, such as the wall of a vascular vessel, and a portion of the signal returns to transducer 330. Transducer 330 then transmits the received signal to transmit/receive switch 340 and a receiver ~~filer~~ filter 350. Timing control and logic circuitry 360 coordinates RF pulse generator 320, transmit/receive switch 340 and receiver filter 350 operation.

Please amend the paragraph beginning at page 9, line 23 of the present specification as follows:

As previously described, the time delay of signals received from echoes off the branch vessel are greater than the time delay from signals received off of the main vessel walls. In one embodiment, receiver filter 350 may be used to indicate to a user of system 100 that side hole ~~11~~ 12 is aligned, or not aligned, with branch vessel ~~14~~ 16. For example, one or more indicator lights

380 may be used to indicate side hole alignment (green) or non-alignment (red). In some embodiments, circuitry 300 does not produce a visual image of the body lumen. Instead, the signals received from transducer 330 are used to indicate sidehole to branch vessel alignment. A power supply 370 facilitates operation of the individual electrical components.